

Appl. No.: 10/531,862  
Amdt. Dated: July 12, 2010  
Reply to Office Action of April 12, 2010

### **REMARKS**

Claims 1-10 stand rejected. Claims 11-29 were previously withdrawn while claims 30-33 were previously cancelled. Claims 3 and 4 have been amended herein. Therefore, claims 1-10 are pending and at issue. Applicants respectfully request reconsideration of the rejections of the claims and allowance of the application.

#### **Claim Rejections - 35 USC § 112**

Claims 3 and 4 stand rejected under 35 U.S.C. § 112 for containing a broad current density range as well as a narrow current density range. Applicants have amended these claims to remove the reference to the narrow current density range. Therefore, this rejection should be withdrawn.

#### **Claim Rejections - 35 USC § 103**

Claims 1 - 4 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious in view of *Carey* (US 6,149,797) when combined with *Khudenko* (US 5,348,629). Applicants respectfully request reconsideration of this rejection as the combination fails to disclose or suggest one or more features recited in the claims.

The Office Action correctly notes that *Carey* fails to disclose or suggest inducing of the high and low current density as recited in the claims. To overcome this deficiency, the Office Action proposes combining *Khudenko* with *Carey*. *Khudenko* is directed to a method for completing cementation reactions. This is done by spontaneous electrochemical reduction, whereas *Carey* and the present application are electrolysis processes, in which the electrochemical reduction/oxidation is not spontaneous. While this may seem a fairly innocuous difference, one of ordinary skill in the art would disagree. There are different mechanisms for

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the two processes, which would not enable one of ordinary skill to readily combine the use of high and low zones of current density of *Khudenko* with the electrolysis process of *Carey*.

The high and low zones of current density in *Khudenko* are used to induce the formation of a migrational layer, which enhances cementation. *Carey*, on the other hand, is directed to controlling the fluid flow to a cathode surface via the use of a special assembly (the mesh). These two documents are clearly unrelated, and would not be considered together by one of ordinary skill in the art. Therefore, one skilled in the art would not combine the references as proposed by the Office Action such that the rejection is improper and should be withdrawn.

The Office Action has also objected to claims 5 - 10 as being obvious in view of *Carey* (US 6,149,797) when combined with *Chorzempa* (US 6,503,385). While it is agreed that a scraping device is provided in *Chorzempa* for the removal of dendrites, *Chorzempa* does not disclose inducing a non-uniform current density across the surface, and neither does *Carey*. It is noted that claims 5 - 10 are all dependent on claim 1 (either directly or via other dependencies). It is therefore submitted that this objection is therefore unfounded. Therefore, this rejection should also be withdrawn as being improper for similar reasons as those presented above with respect to claim 1.

Reconsideration of the rejections, in light of the aforesaid amendments and present remarks, is respectfully requested. The present amendments have been entered for the purpose of placing the application into a proper condition for allowance.

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CONCLUSION

Should any informal matters remain which can be corrected by Examiner's amendment, Applicant requests that the undersigned be contacted by phone in order to expedite the prosecution of the present case.

If any fees are due in connection with this application, the Patent Office is authorized to deduct the fees from Deposit Account No. 19-1351 as required. If such withdrawal is made, please indicate the attorney docket number (37388-405100) on the account statement.

Respectfully submitted,

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